



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/304,906	05/04/1999	RALPH E. SIPPLE	33012/264/10	1322

27516 7590 10/05/2006

UNISYS CORPORATION
MS 4773
PO BOX 64942
ST. PAUL, MN 55164-0942

EXAMINER

TRAN, HAI V

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/304,906	Applicant(s) SIPPLE ET AL.	
	Examiner Hai Tran	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 07/10/2006 have been fully considered but they are not persuasive.

Claim 1, Applicant argues (see Applicant 's remark, page 14), "Thus, the Examiner has apparently found that each of elements 350, 370, and 572 separately and individually correspond to the claimed "first processor", because he has chosen the disjunctive "or" rather than the conjunctive "and". This finding is clearly erroneous, because none of these three elements (i.e., 360, 370, or 572) has any "hardware architecture" described by Craig, so none is taught to be "optimized to perform a variety of computational tasks" as claimed."

In response, the Examiner respectfully disagrees with Applicant because Applicant misconstrues and fails to peruse Craig reference. Craig shows various processors 350, 370 of Fig. 2, 3A or Gateway 572 of Fig. 5. One of ordinary skill in the art would recognize that the cited processors inherently have their hardware architecture optimized to perform varied computational tasks (see Col. 14, lines 21-30). If applicant disagrees with the Examiner assertion then Applicant is requested to explain why Craig processors 350 or 370 of Fig. 2, 3A, for example, does not have any hardware architecture optimized to perform varied computational tasks, as disclosed. Until then the Examiner maintains the rejection.

Applicant further argues, "Even more apparent, none of elements 350, 370, or 572 "spools the requested video data" as claimed. Therefore, the Examiner provides an extensive citation (i.e., column 13, line 45, through column 14, line 30) which says nothing of the operation of element 572 and establishes that neither element 350 nor element 370 has anything to do with the claimed spooling function."

In response, the Examiner respectfully disagrees with Applicant because Craig clearly indicates that processor 350 processes the incoming request from subscriber which spools the requested video data in response to the request. The Examiner cites, "... The *incoming data is interrogated for content* and selectively forwarded to the appropriate module for processing: session manager 310 for VOD..."

Applicant further argues, "The second claimed element is "a video server memory responsively coupled to said first processor in which said spooled requested video data is stored". In making his rejection, the Examiner cites Fig. 2, 3B, and 5, element 270. Though element 270 is shown in Figs. 2 and 3B, it does not appear in Fig. 5. None of these three Figures shows the claimed coupling to elements 350, 370 and 572 which are alleged by the Examiner to be the claimed "first processor".

In response the Examiner respectfully disagrees with Applicant because Fig. 3A-B clearly discloses at least 1st processor 350/370 coupled to various memories within the system, i.e., 276, 278, 282, 286, and 290 wherein each of these memories is used for spooled video data according to priority assignments and storage capability of each media, as discloses, see Col. 8, lines 51-Col. 11, lines 42.

Applicant further argues, "Again, the Examiner has apparently find alternative elements (i.e., elements 330 and 541) which meet the limitations of Applicants' claimed third element (i.e., "second processor"). However, Craig says nothing of the architectures of these two elements, so it cannot be determined if they are optimized as claimed or if they are different from the claimed "first hardware architecture". Neither of these elements is even directly coupled to element 270 which the Examiner has found to be the claimed "video server memory". And neither of these elements is taught by Craig to "stream" the "spooled requested video data" to the subscriber as claimed."

In response, the Examiner respectfully disagrees with Applicant because Craig clearly discloses the 2nd processor 330 of Fig. 3A-B or processor 541 of Fig. 5 in which at least Fig. 2A clearly shows 2nd processor 330 has different hardware architecture to 1st processor 350. Craig further shows that 2nd processor 330 of Fig. 2A-B is further coupled to the video server memory 270. Craig further discloses the subscriber receiver which accesses the spooled requested video data directly from the video server memory 270 without passing through the 1st processor (Col. 13, lines 45-61; Col. 14, lines 63-Col. 15, lines 8) and streams the spooled requested video data to the plurality of subscriber receivers in a plurality of streams spaced apart by a predetermined time (Col. 15, lines 8-20; Col. 16, lines 60-65).

Claim 2, Applicant further argues, "the Examiner cites Fig. 5 with associate memory, which has nothing to do with his finding of element 270 as the claimed "video

server memory" and has nothing to do with the claimed "commercial computer memory platform".

In response, the Examiner respectfully disagrees with Applicant because Applicant again fails to peruse Craig reference. The Examiner clearly indicates that Craig's Fig. 5 with associate memory clearly corresponds to video server memory 270 of Fig. 3A-B. In view of that Craig further meets Applicant's claimed limitation "wherein the video server memory further comprises a commercial computer memory platform". If Applicant disagrees with the Examiner assertion that Craig's Fig.5 with associate memory or Craig's video server memory 270 of Fig. 3A-B is NOT a commercial computer memory platform then the Examiner requests Applicant to further explain why Craig's memory is NOT a commercial computer memory platform.

Claim 4, Applicant further argues, "In making his rejection, the Examiner cites Craig, column 16, lines 33-55, which clearly establishes that gateway 572 cannot meet the limitations of the claimed "first processors".

In response, the Examiner confuses because Applicant does not offer any explanation why Craig gateway 572 is NOT a transaction server, as claimed. The Examiner asserts that Gateway 572 is a transaction server, as claimed, and responsibly coupled to the subscriber receiver and the video server memory (see Col. 16, lines 38-55).

Claim 5, Applicant again argues "Claim 5 depends from claim 4 and further limits the claimed "requested video data". As explained above, Craig cannot meet the limitations of claim 4 from which claim 5 depends."

In response, Applicant does not clearly point out the Examiner error but merely stated "Craig cannot meet the limitations of claim 4 from which claim 5 depends"; therefore, the Examiner maintains the rejection.

Claim 6, Applicant further argues, "Craig does not have "two subscribing television receivers" as alleged by the Examiner."

In response, the Examiner respectfully disagrees with Applicant because Applicant again misconstrues Craig reference. It is noted Craig Fig.1 shows ONLY a representative of the system. One of ordinary skill in the art would recognize that Craig clearly has a plurality of subscribers wherein each Craig system's subscriber has a TV receiver for performing VOD, as disclosed. As such, Applicant argument is nonsense.

Applicant further argues, "The last claimed element is limited by "streams said spooled video program to said two subscribing television receivers as two separate spaced apart streams from said copy of said video program wherein said two separate spaced apart streams are spaced apart from each other by a time period which is greater than zero". This limitation is clearly not shown by Craig."

In response, the Examiner respectfully disagrees with Applicant because this limitation is met by Craig, as discussed in claim 1.

Claims 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, Applicant merely argues that Craig does not have the claimed limitation without explicitly point the Examiner error; therefore, the Examiner asserts again that Craig meets all claimed limitation as discussed in the previous Office action.

Claims 3, 7-9, and 13, Applicant argues, "The rejection of claims 3, 7-9, and 13, is respectfully traversed for failure of the Examiner to present a prima facie case of obviousness as specified by MPEP 2143."

In response to applicant's argument that there is no suggestion to modify the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Craig clearly discloses a media server for supplying video and multimedia data over the network to subscribers. Craig further discloses media server comprises plurality of processor modules, i.e., 350, 370, 210, 330, 410, etc.. wherein each of the processor module shows different processor architectures (see Fig. 3A-B).

It's known that VOD servers using Windows NT based processor is notoriously well known in the art. Therefore, the Examiner asserts again that it would have been

Art Unit: 2623

obvious to one of ordinary skill in the art would be motivate to modify Craig 's server system with an industry compatible, Windows NT based processor, as claimed for the benefit of saving cost and operation. Moreover, to take the advantage of the industry standard processor, for example the well known Intel processor that is fully compatible with Windows NT OS. In view of that the Examiner cites US 6230200, Col. 8, lines 48-67 and US 5740388; Fig. 1, el. 12 and Col. 3, lines 40-Col. 4, lines 38 to support.

Claim 7, Applicant further argues, "Craig does not have the claimed video processor. Therefore, Craig cannot have these further limitations."

In response, the Examiner respectfully disagrees with applicant because if Craig does not have a video processor, as alleged by Applicant, then the Examiner requests Applicant to explain why Craig does not have the video processor? The Examiner cites Col. 13, lines 35-45 in which Craig clearly discloses an MPEG encoder for accommodating MPEG-II compression for transmission.

Claims 8-9, and 13 are met my Craig, as above discussion.

In conclusion, the Examiner maintains the rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-2, 4-6, 10-12, 14-25 are rejected under 35 U.S.C. 102(e) as being unpatentable by Craig (US5790176).

Claim 1, Craig discloses in a VOD system for supplying requested video data to a plurality of subscriber receivers (Fig. 1-3), the improvement comprising:

A 1st processor (350,370 of Fig. 2, 3A or gateway 572 of Fig. 5) having a 1st hardware architecture optimized to perform a variety of computational task, which spools the requested video data in response to the request (Col. 13, lines 45-Col. 14, lines 30);

A video server memory (270, Fig. 2, 3B) responsively coupled to the 1st processor in which the spooled requested video data is stored (Fig. 5); and

A 2nd processor (330, Fig. 3A; Fig. 5, el. 541) having a 2nd hardware architecture different from the 1st hardware architecture optimized to perform I/O operations responsively coupled to the video server memory and the subscriber receiver which accesses the spooled requested video data directly from the video server memory without passing through the 1st processor and streams the spooled requested video data to the plurality of subscriber receivers in a plurality of streams

spaced apart by a predetermined time (Col. 13, lines 45-61; Col. 15, lines 8-20; Col. 16, lines 60-65).

Claim 2, Craig further discloses wherein the video server memory further comprises a commercial computer memory platform (Fig. 5 with associate memory).

Claim 4, Craig further discloses wherein the 1st processor further comprises a transaction server responsively coupled to the subscribing receiver and the video server memory (gateway 572 of Fig. 5; Col. 16, line 33-55);

Claim 5, Craig further discloses wherein the requested video data further comprises MPEG-2 format (Col. 12, lines 35-62).

Claim 6, is analyzed with respect to claims 1 and 4 in which Craig further discloses two subscribing television receivers (Fig. 1) each of which providing a separate spaced apart service request for a video program (Col. 16, lines 55-Col. 17, lines 6);

Claim 10, wherein the 1st architecture of the transaction server is optimized about a variety of processing operations (gateway 572 of Fig. 5; Col. 16, line 33-55);

Claim 11 Craig discloses a VOD system (Fig. 1-3) comprising:

1st requesting means for requesting a VOD program at a 1st time (reads on 1st user/client request a program at time T1; see Col. 14, lines 21-30; Col. 16, lines 2, lines 40-49).

2nd requesting means for requesting said VOD program at a later time (reads on 2nd user/client request the same program at time T2; see Col. 13, lines 45-61; Col. 14, lines 21-30).

Transaction means (350,370 and 250 of Fig. 2, 3A-B or gateway 572 of Fig. 5) having a 1st hardware and software architecture optimized about a variety of processing operation responsively coupled to the 1st requesting means and the 2nd requesting means for spooling the VOD program (Col. 13, lines 45-Col. 14, lines 30)

Storing means (270, Fig. 2, 3B) responsively coupled to the transaction processing means (350,370,250 of Fig. 2 or gateway 572 of Fig. 5) for storing a copy of the spooled VOD program (Col. 10, lines 30-Col. 13, lines 45); and

Video processing means (330 of Fig. 3A, output controller /control server with associated memory devices of Fig. 5) having a 2nd hardware and software architecture different from the 1st hardware and software architecture and optimized input/output processing responsively coupled to the storage means for access and the requested VOD program twice directly from the copy stored within the storing means (270, Fig. 2, 3B) without passing the requested VOD program through the transaction processing means and from streaming the requested VOD program at a 1st time to the 1st requesting means and at the 2nd and later time to the 2nd requesting means (Col. 13, lines 45-61; Col. 15, lines 8-20; Col. 16, lines 60-65).

Claim 12, wherein the 1st requesting means further comprise a subscriber box (see Fig. 1, el. 130).

Claim 14, wherein the video processing means further comprises a commercial computer memory platform (Fig. 5 with associate memory).

Claim 15, further comprises a transaction subsystem for managing archival storage of video streams in hierarchical storage management system that is integrated with the management application and requires no manual intervention (see Fig. 5, Fig. 3, el. 250, librarian Col. 9, lines 30-46).

Claim 16, the method of claim 16 is analyzed with respect to apparatus claim 16 in which Craig further discloses streaming the corresponding video program directly from the single copy of the video program to the 1st subscriber at a 3rd time by a video processor having a second hardware and software architecture (reads on Transmission of the request is delayed for a predetermined number of minutes N in response to the 1st request for the video selection, i.e. at $T1+N$, the requested video start to transmit; Col. 15, lines 10-27) ; and

Streaming the corresponding video program directly from the single copy of the video program to the 2nd subscriber begin at a time different from and later than

the 3rd time by the video processor (reads on the subsequent request from the 2nd subscriber that outside the delay period N; Col. 15, lines 10-27);

Claim 17, Craig further discloses streaming the corresponding video program to the 1st subscriber at the 3rd time and streaming the corresponding video program to the 2nd subscriber at a 4th time if the difference between the 2nd later time and the 1st time is greater than a predetermined interval (reads on the subsequent request from the 2nd subscriber that outside the delay period N; Col. 15, lines 10-27);

Claim 18, Craig further discloses wherein the predetermined interval further comprises about one minute (reads on the 2nd later request time T2 is outside (greater than) the delay period N from the time the 1st user/client request a program at time T1, i.e. $T2 > T1 + N$; Col. 15, lines 10-27).

Claim 19, Craig further discloses fast forwarding the stream to the 1st subscriber in response to a FF from the 1st subscriber (Col. 8, lines 43-50).

Claim 20, Craig further discloses performing subscriber accounting to enable billing the 1st subscriber for the VOD request (Col. 7, lines 9-12).

Claim 21 is analyzed with respect to claim 11.

Claim 22, Craig further discloses wherein the 1st hardware and software architecture is optimized for a variety of transaction processing task (Col. 13, lines 45-Col. 14, lines 30).

Claim 23, Craig further discloses wherein the 2nd hardware and software architecture is optimized for I/O processing (Col. 13, lines 45-61).

Claim 24, Craig further discloses wherein the memory is a temporary memory for storage of the video program from the spooling to the streaming (Fig. 3B, el. 278; Fig.4 DRAM storage unit; Fig. 5, el. 531).

Claim 25, Craig further discloses wherein the memory further comprises commercial computer memory platform (see Fig. 5).

.Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3, 7-9, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig (US5790176).

Claim 3, Craig discloses wherein the 2nd processor further comprises an industry compatible (Col. 16, lines 17-28).

Craig does not clearly disclose the processor is a "Windows NT based processor".

Official Notice is taken that using "Windows NT based processor" is notoriously well known in the art, i.e. Intel Processor is a Windows NT based processor because Intel processor is fully compatible for supporting NT windows OS. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Craig's processor with "Windows NT based processor", i.e. Intel processor, so to take the advantage of the well known industry standard based Intel processor for compatibility with Windows NT OS and moreover for reducing cost of maintenance and operation.

Claim 7 is analyzed with respect to claim 3.

Claim 8, Craig further discloses wherein the video server memory further comprises a commercial computer memory platform (Fig. 5 with associated memory. Note: any memory disclosed, i.e., Disk, RAM, tape, etc..., is a commercial computer memory).

Claim 9, Craig further discloses wherein the requested video data further comprises MPEG-2 format (Col. 12, lines 35-62).

Claim 13, wherein the video processing means further comprises an industry computer (control server 570 of Fig. 5; Col. 16, lines 33-38).

Craig does not clearly disclose the industry computer (control server 570) is a standard personal computer.

Official Notice is taken that using a standard personal computer with industry standard Intel Processor for running NT windows OS, as server/controller, is notoriously well known in the art; Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Craig's industry control server 570 with a standard PC with Intel processor, so to take the advantage of the well known Intel processor for compatibly with Windows NT OS and moreover for reducing cost of maintenance and operation.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is (571) 272-7305. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HT:ht
09/29/2006


HAI TRAN
PRIMARY EXAMINER